

The PNP Index – A New Metric for Evaluating Financial Performance

Author: Motty Shai

Date: February 1, 2025

Abstract:

The **PNP Index (Positive-Negative Probability Index)** is a newly developed metric designed to assess financial performance by balancing **returns and volatility** in a unique way. Traditional risk-adjusted measures like the **Sharpe ratio** fail to provide accurate insights when return distributions are highly skewed or volatile. The PNP Index overcomes these limitations by focusing on the proportion of positive returns relative to the total return variability.

This paper introduces the concept, explains its mathematical formulation, and demonstrates its superiority over existing measures through **backtesting and historical market data analysis**. Additionally, the PNP Index serves as a powerful tool for **evaluating the effectiveness of trading indicators and AI-driven predictive algorithms**. By adopting the PNP Index, traders and analysts can gain **better insights into market behavior** and develop **superior investment strategies**.

Keywords: Financial Markets, Trading Strategies, Logarithmic Returns, Investment Analysis, Risk Management, Algorithmic Trading, AI-based Forecasting